

REMARKS

Applicants hereby acknowledges the Examiner's withdrawal of the rejections stated in paragraphs 2-6 of the Office Action. Applicants particularly acknowledge the Examiner's conclusions stated in paragraphs 5-6 of the Office Action that the prior rejections of claims 1-43 under 35. U.S.C. 103 have been overcome by Applicants' arguments in the paper filed January 6, 2006. The undersigned further thanks the Examiner for the telephonic interview graciously granted on April 13, 2006, during which the new rejections were discussed and the Examiner agreed to reconsider Applicants' arguments regarding the non-obviousness of the claimed invention.

The Examiner has rejected claims 1-28 and 40-42 under 35 U.S.C. 103(a) as being unpatentable over U.S. patent application 2003/0008152 to Tsai et al. in view of Kawachi et al. and further in view of U.S. patent 4,751,270 to Urawa et al. It is respectfully submitted that the rejection is incorrect.

The invention provides multilayered films comprising a fluoropolymer layer attached to a thermoplastic polymer layer via an intermediate adhesive tie layer, which adhesive tie layer comprises an adhesive combination of at least one tackifier and at least one ethylene/alpha-olefin copolymer. The composition of the adhesive tie layer facilitates the adhesion of layers of such dissimilar polymeric materials that are otherwise incompatible, particularly fluoropolymer layers a thermoplastic polymer layer.

The Tsai et al. reference discloses multilayer moisture barrier films useful as packaging materials. More particularly, Tsai et al. describes multilayer barrier films that comprise a fluoropolymer layer attached to a cyclic olefin polymer layer via an intermediate adhesive tie layer. As the Examiner acknowledges, while Tsai et al. does describe fluoropolymer layer containing multilayer film structures, Tsai et al. fails to disclose the adhesive compositions of the presently claimed invention. Specifically, Tsai et al. fails to teach an

adhesive tie layer that comprises a combination of a tackifier and an ethylene- $\alpha$ -olefin copolymer.

To fill this void, the Examiner has applied Kawachi et al. Kawachi et al. teaches an adhesive composition which includes an ethylene/ $\alpha$ -olefin copolymer and a tackifier. The adhesive compositions of Kawachi et al. may be formed into an adhesive layer for multilayer laminates, the adhesive layer having good adhesive force to polystyrene resins, ABS resins, polyacrylonitrile resins and ethylene vinyl acetate copolymer saponified resins. Kawachi et al. does not teach fluoropolymer containing multilayer films, and do not teach that their adhesive compositions are capable of adhering to fluoropolymer films.

The Examiner further applies Urawa et al., which is mentioned in the Tsai reference as describing polyolefins useful in their adhesive layer. Particularly, Urawa et al. describes maleic acid-modified polyolefins, and in particular, an improved processes for the formation of maleic acid-modified polyolefins. To be sure, Urawa et al. discloses modified polyolefins that may comprise copolymers of ethylene and an  $\alpha$ -olefin. Nonetheless, Urawa et al. does not teach or suggest the combination of their modified polyolefins with a tackifier for any purpose. More importantly, the Urawa et al. reference fails to overcome the differences between the claimed invention and the combination of the Tsai and Kawachi et al. references.

With respect to the Tsai and Kawachi, et al. references, it is respectfully submitted that the Examiner has improperly combined the references. Importantly, there is no teaching or suggestion in either reference to combine the multilayer films disclosed by Tsai et al. with the adhesive compositions described by Kawachi et al. "It is well settled that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so" *ACS Hospital Sys., Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). See *In re Rouffet*, 149 F.3d 1350,

1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper). The Furthermore, there is no evidence in the Kawachi et al. reference that their adhesive compositions would even be compatible with fluoropolymers, let alone be sufficient to adhere fluoropolymer layers with other polymeric layers.

Applicants submit that the Examiner is looking beyond the teachings of the references. The belief that one skilled in the art **could** form the claimed multilayered film does not suggest that one **should** form such a film to obtain the disclosed benefits. The mere fact that references **can** be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Such a suggestion is absent in each of the references.

Accordingly, it is respectfully submitted that one skilled in the art would not look to the Kawachi et al. reference in combination with the Tsai et al. reference to arrive at the presently claimed invention. For these reasons, it is requested that the rejection be withdrawn.

The Examiner has rejected claims 29 and 43 under 35 U.S.C. 103(a) as being unpatentable over Tsai et al. in view of Kawachi et al. and further in view of U.S. patent 6,849,314 to Jing et al. It is respectfully submitted that the rejection is not well taken. Particularly, the present rejection is a repetition of the rejection of claims 29 and 43 from the prior Office Action, which the Examiner has already withdrawn in paragraph 6 of the present Office Action in view of Applicants' arguments in the paper filed January 6, 2006. No new reference has been applied.

Nevertheless, Applicants respectfully urges that the rejection is incorrect. Tsai et al. and Kawachi are discussed in detail above and those arguments are repeated herein. Jing et

al. teaches fluoropolymer blends and multilayer articles, such as tubes. In the first instance, the Examiner is directed to col. 1, lines 30-31 where Jing acknowledges the known difficulty in the art of bonding fluoropolymer layers to non-fluoropolymer layers. Such exemplifies the need in the art for Applicants' invention, particularly, a novel adhesive composition which is capable of adhering fluoropolymer layers to virtually any thermoplastic polymer layer. In recognition of this problem, Jing et al. teaches many film structures, most of which include fluoropolymers in each film layer. The structures of Jing et al. are different than those described by applicant, and the reference particularly fails to teach a multilayer film comprising a fluoropolymer layer being attached to a non-fluoropolymer layer via a non-fluoropolymer containing adhesive tie layer. More particularly, Jing et al. fails to teach a tie layer including an ethylene/ $\alpha$ -olefin copolymer and a tackifier. It is respectfully submitted that the disclosure of Jing et al. fails to overcome the deficiencies between Tsai et al. and Kawachi et al.

Applicants submit that the Examiner has not met the threshold requirements for establishing a *prima facie* case of obviousness. In determining a *prima facie* case of obviousness, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification. *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). To do so, the applied prior art must be such that it would have provided one of ordinary skill in the art with both a motivation to carry out the claimed invention and a reasonable expectation of success in doing so. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991); *In re O'Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). The Kawachi et al. and Tsai et al. references fail to provide such motivation and reasonable expectation of success.

Applicants respectfully submit that the Examiner is reconstructing the art in light of Applicants' disclosure. The point in time that is critical for an obviousness determination is at the time the invention. "To imbue one of ordinary skill in the art with knowledge of

the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Obviousness cannot be established by hindsight combination to produce the claimed invention. *In re Gorman*, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). It is the prior art itself, and not the Applicants' achievement, that must establish the obviousness of the combination. Where Applicants' teachings are needed to as a guide to piece together the invention, the invention is not obvious. There is simply nothing in the cited references to suggest to someone skilled in the art that these teachings should be combined in order to achieve this result.

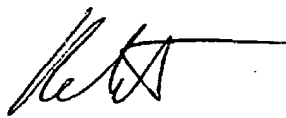
The Examiner has failed to show the linchpin to connect the art and has failed to show a suggestion in the art rather than from an unsupported subjective conclusion, to form the claimed structure. The ancient argument that a building design is not obvious in view of a pile of bricks and mortar from which it is constructed, is equally applicable here. Citing references that merely indicate that isolated parts recited in the claims are known is not a sufficient basis for a conclusion of obviousness; there must be something that suggests the desirability of combining the references in a manner calculated to arrive at the claimed invention. *Ex parte Hiyamizu*, 10 U.S.P.Q.2d 1393, 1394 (PTO Bd. Pat. Ap. and Int., 1988).

In addition, in determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schneck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). It is respectfully asserted that the invention as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made.

For the foregoing reasons, it is respectfully submitted that the claims are not obvious in view of the Tsai et al., Kawachi et al., Urawa et al. and Jing et al. references, either alone or in combination. It is therefore requested that the rejection be withdrawn. In addition since the method claims contain all of the limitations of the article claims, the method claims should be rejoined under *In Re Ochiai*, 37 USPQ2d 1127 and *In re Brouwer*, 37 USPQ 1663.

The undersigned respectfully requests re-examination of this application and believes it is now in condition for allowance. Such action is requested. If the Examiner believes there is any matter which prevents allowance of the present application, it is requested that the undersigned be contacted to arrange for an interview which may expedite prosecution.

Respectfully submitted,



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I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office (FAX No. 571-273-8300) on April 18, 2006.



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